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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,509	01/12/2001	Werner Knebel	293.000410	2458

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EXAMINER

NGUYEN, THONG Q

ART UNIT PAPER NUMBER

2872

DATE MAILED: 05/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant N .

09/759,509

Applicant(s)

KNEBEL, WERNER

Examiner

Thong Q. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2002 and 04 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-43 is/are pending in the application.
- 4a) Of the above claim(s) 12-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-11 and 29-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 11 December 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The present Office action is made in response to the amendment (Paper Nos. 12 and 14) filed on 12/11/02 and 3/4/03. It is noted that applicant has canceled claim 2 in the amendment. As a result, the pending claims now claims 1 and 3-43 in which claims 1, 3-11, and 29-43 are examined in this Office action, and claims 12-28 have been withdrawn from further consideration as being directed to non-elected claims.

Drawings

2. The addition of two new figures 5 and 6 into the application as requested in Paper No. 12 has been approved and thus entered. As a result, the present application now contains six sheets of figures 1-6.

Specification

3. The substitute specification filed on 12/11/2003 has been entered.

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 33-38 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

See the reasons as set forth in the previous Office action (Paper No. 9, pages 3-5, element 8). It is noted that applicant has not made any amendment(s) to the claim(s) to overcome the rejection to the rejection of claims 33-38 or provided any arguments to prove that the device as claimed in claims 33-38 has sufficient support in the present specification.

Claim Rejections - 35 USC § 102

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1, 3-4 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ichie (U.S. Patent No. 5,796,112, of record).

Ichie discloses a laser scanning microscope having an illuminating system and detecting systems for detecting fluorescent light from a sample. The microscope as described in columns 14-16 and shown in fig. 10, for example, comprises a laser light source (1) for providing light to a sample (15) containing fluorescent agent wherein the sample has a top side facing to an objective lens system (14) and a bottom side facing to a condenser lens system (17), a scanning system (12) for scanning the light from the laser in two directions on the sample; a set of dichroic beam-splitters (31b and 31c), a set of detecting devices (19a-19c) wherein the detecting devices (19b-19c) receive

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fluorescent light reflected from the beam-splitters and the detecting device (19a) receives light transmitted through the beam-splitters. It is noted that 1) the light received by the detecting devices (19a-19c) are the light pass through the sample (15); 2) the detecting device can be a multiband detecting device. See column 14 and fig. 8; and 3) the beam-splitters and the detecting devices are disposed on the same side with the condenser lens system. Regard to the use of a single detecting device for receiving both fluorescent light and transmitted light passing through the sample. It is noted that in the embodiment as described in columns 8-9 and shown in fig. 1, Ichie discloses the use of a single detecting device (19a) on the same side with the condenser lens system (17) for receiving the fluorescent and transmitted light.

9. Claims 29-34, and 39-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Jorgen (U.S. Patent No. 5,535,052, of record).

Jorgen discloses a laser scanning microscope having an illuminating system and detecting systems. The laser scanning microscope as described in columns 4-6 and shown in fig. 2, for example, comprises a laser light source (31) for providing light to a sample containing fluorescent agent wherein the sample has a top side facing to an objective lens system (5) and a bottom side facing to a condenser lens system (24), a scanning system (13,14) for scanning the light from the laser in two directions on the sample; a set of dichroic beam-splitters (36-39), a set of detecting devices (29 and 47-49) wherein the detecting devices (47-49) receive fluorescent light reflected from the beam-splitters and the detecting device (29) receives light transmitted through the sample containing fluorescent dye activated by the laser light. It is also noted that the

use of another light sources is suggested by Jorgen when he teaches the additional light source modules (D and E) on the same side with the objective lens system (5) and another light source (28) which as understood is a while light source on the same side with the condenser lens system (24). The use of filter for each of additional light sources is also suggested by Jorgen as can be seen in column 6.

Claim Rejections - 35 USC § 103

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichie (U.S. Patent No. 5,796,112) in view of Kapitza (DE 37 42 806) (both of record).

The laser scanning microscope provided by Ichie meets all of the limitations recited in the pending claims 5-8 except the feature concerning the comparison between the apertures of the objective lens system and the condenser lens system. However, a scanning microscope having an illuminating system and a detecting system wherein the aperture of the condenser lens system is larger than the aperture of the objective lens system is clearly suggested to one skilled in the art as can be seen in the laser scanning microscope for detecting fluorescent sample provided by Kapitza. See columns 3-4 and fig. 2. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the laser scanning microscope provided by Ichie by using a condenser lens system having an aperture larger than the aperture of the

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objective lens system as suggested by Kapitza for the purpose of improving the collection of the fluorescent detected light to the detecting devices.

12. Claim 35, as best as understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Jorgen (U.S. Patent No. 5,535,052) in view of Kapitza (DE 37 42 806).

The laser scanning microscope provided by Jorgen meets all of the limitations recited in the pending claim 35 except the feature concerning the comparison between the apertures of the objective lens system and the condenser lens system. However, a scanning microscope having an illuminating system and a detecting system wherein the aperture of the condenser lens system is larger than the aperture of the objective lens system is clearly suggested to one skilled in the art as can be seen in the laser scanning microscope for detecting fluorescent sample provided by Kapitza. See columns 3-4 and fig. 2. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the laser scanning microscope provided by Jorgen by using a condenser lens system having an aperture larger than the aperture of the objective lens system as suggested by Kapitza for the purpose of improving the collection of the fluorescent detected light to the detecting devices.

Response to Arguments

13. Applicant's arguments filed on 12/11/2002 have been fully considered but they are not persuasive.

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A) With regard to the rejection of claims 1, 3-4 and 9-11 under 35 USC 102(B) over the art of Ichie, applicant's arguments as provided in the amendment (Paper No. 12, pages 4-5) have been fully considered but they are not persuasive for the following reasons:

First, In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the detecting system for detecting/receiving non-fluorescent transmitted light) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). *Applicant is respectfully invited to review the pending claims which claimed the feature of at least one transmitted light detector for detecting light transmitted through the specimen (claim 1, line 6, for example). The claim has never recited the transmitted light is non-fluorescent transmitted light used in the applicant's arguments.*

Second, applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Applicant argued that the device of Ichie does not have any detecting system for detecting transmitted light; the Examiner respectfully disagrees with the applicant's opinion and respectfully invited the applicant to review the art of Ichie with the device having the features as claimed.

Applicant should note that while applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. Process Control Corp. v. HydReclaim Corp., 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "transmitted" as understood is referred to "light transmitted through", it is different from 'reflected'. Applicant is respectfully invited to provide at least one written evidence to show that "transmitted light" is "non-fluorescent light" in case that applicant still maintain his own definition for the term used in the claim. In the rejection to the claim, the detecting system having detecting elements (19a-19c) provided by Ichie are clearly the elements for detecting the transmitted fluorescent light from the specimen.

B) With regard to the rejection of claims 29-34 and 39-43 under 35 USC 102(b) over the art of Jorgen, applicant's arguments provided in the amendment (Paper No. 12, page 5) have been fully considered but they are not persuasive for the following reasons.

Applicant argued that the device provided by Jorgen does not disclose the use of an additional light source for illuminating the specimen. It is the applicant's opinion that the light source (28) disposed on the specimen side is not adapted for illuminating the specimen. *The Examiner respectfully disagrees with the applicant's opinion. Applicant is respectfully invited to review the art of Jorgen,*

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column 5 and fig. 2, in which the light from the source (28) reflected from the mirror (25) is illuminated the specimen via the lens (24). There is not any teachings in the art of Jorgen to show that the light from the light source (28) reflected from the reflecting element (25) and passed through the lens (24) cannot incident/come on the specimen. Applicant should further note that the claim does not have nay structural and/or functional features for the additional light source recited in the claim except the function "illuminate the specimen"

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

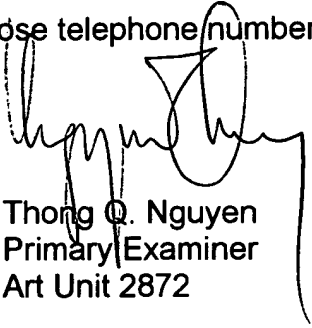
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Nguyen whose telephone number is (703) 308-4814. The examiner can normally be reached on M-F.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.



Thong Q. Nguyen
Primary Examiner
Art Unit 2872

May 16, 2003